**My Partners are:**

|  |  |
| --- | --- |
| **Name** | **Email** |
|  |  |
|  |  |

**Background information and notes.**

**Using words or images, record your notes as you view the mousetrap car powerpoint and watch the demonstration videos.**

**BACKGROUND RESEARCH journal**

Having learned a bit about mousetrap cars; what are some things you feel you might need to think about as you construct a mousetrap car that can travel the farthest?

|  |  |
| --- | --- |
| Research Question |  |
| What I Already Know |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Title | Facts | What information was new to you? | How helpful was the resource?  1 (not very)  3 somewhat  5 (very) |
| Source 1 |  | 1  2  3 |  |  |
| Source 2 |  | 1  2  3 |  |  |
| Source 3 |  | 1  2  3 |  |  |

|  |  |
| --- | --- |
| Summary of your findings |  |
| How this can help you in planning your mousetrap car |  |

**BRAINSTORM journal**

Working independently, write down your ideas for the car you want to make. Once you have a list of several ideas, make a sketch to show what your car would look like from the top, side and bottom. Since this is your first sketch of your ideas, it is called a prototype.

IDEAS

**Prototype Sketch**

|  |  |
| --- | --- |
| **Top** | **Side** |
| **Bottom** |  |

**Group Brainstorm Discussion Journal**

**O**nce all group members have completed a brain storming journal, you will meet together to share at your ideas. You are going to discuss what is the **same and different** about your prototypes. It is important that you listen to each other. Working well in teams is a life skill that takes practice. Use the sentence starters in your conversations. Take you time and make sure you are not just hearing your partners, but also *listening* to them. Be open to other’s ideas. It is important that you work well with your team to determine your group plan and **why** you think it will help you car travel the farthest.

RULES FOR THE DISCUSSION

1. Be respectful
2. Take turns
3. This is NOT about your idea winning or losing, this is about working together to make a plan.

**Soliciting a Response**

What do you think?

We haven’t heard from you yet. Do you agree?

What do you propose?

**Language of inquiry**

I want to ask you about…

Could you expand a bit on what you said about…

Sorry, I am not quite clear on…

**Paraphrasing**

So what you are saying is..

In other words, you think…

What I hear you saying is…

Language of agreeing

My idea is similar to…

I agree with (person) that…

I don’t agree with (person) because

**Expressing an idea**

I think/ believe that….

In my opinion…

Based on my experience, I think….

**Summary of our discussion:**

**These are the most important things that were the same in our prototypes and ideas.**

|  |  |  |
| --- | --- | --- |
| Attribute/ idea | Why we think we need to include it | Material we need for it |
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**These are our biggest concerns**

|  |  |  |
| --- | --- | --- |
| Concern | Person raising concern | Reason for concern |
|  |  |  |
|  |  |  |
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**Group “body” design and Reasoning journal**

**Group’s Prototype Sketch**

|  |  |
| --- | --- |
| **Top** | **Side** |
| **Bottom** |  |

**List of materials needed**

|  |  |  |
| --- | --- | --- |
| **Item** | **Amount needed / measurement** | **Why we chose this item** |
|  |  |  |
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**Notes or comments:**

**Slogan and sales journal**

Before you participate in the mousetrap car races, you will need a team name and a slogan. Work together to come up with something creative and school appropriate.

**Our Team Name**

**Why we chose this name:**

**Our team slogan:**

**Why we chose this slogan:**

**Our team colors:**

**Why we chose these colors:**

**Test Observations and Data Journal**

**Table 1 – First test of the 1 Meter Drop**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Team name** | **Description of car** | **Trial runs (distance in meters)**  **First run second run average of**  **both runs** | | | **Notes / observations** |
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**GRAPH YOUR DATA (team vs average distance) on the next page. Include a title and LABEL THE AXIS. Look over your graph. Make notes about trends you see in the data (review your descriptions of the cars and the distances they traveled). Write a paragraph about the trends you noted.**

**Graph and data reflection**

**Title\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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Trends:

**Reflection journal**

1. How far did your car travel?
2. What **was successful** in the design of your craft?
3. What was NOT successful in the design of your craft?
4. In your class, which designs were the most **creative,** and how?
5. In your class, which designs were the most **effective,** and why?
6. What **material** would you use in another design that you did not use today, and WHY?
7. Knowing what you know now, how would you **improve upon your design** to make it work better on the next try?